LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An Ni-based single crystal super alloy having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 1.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co and 4.1-14.0 wt% of Ru in terms of its weight ratio, with the remainder consisting of Ni and unavoidable impurities.

2. (Original) An Ni-based single crystal super alloy having a composition comprising 5.0-7.0 wt% of Al, 4.0-6.0 wt% of Ta, 1.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, and 4.1-14.0 wt% of Ru in terms of weight ratio, with the remainder consisting of Ni and unavoidable impurities.

3. (Original) An Ni-based single crystal super alloy having a composition comprising 5.0-7.0 wt% of Al, 4.0-6.0 wt% of Ta, 2.9-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co and 4.1-14.0 wt% of Ru in terms of weight ratio, with the remainder consisting of Ni and unavoidable impurities.

4. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.9 wt% of Al, 5.9 wt% of Ta, 3.9 wt% of Mo, 5.9 wt% of W, 4.9 wt% of Re, 0.10 wt% of Hf, 2.9 wt% of Cr, 5.9 wt% of Co and 5.0 wt% of Ru in terms of weight ratio, with the remainder consisting of Ni and unavoidable impurities.

5. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.8 wt% of Al, 5.6 wt% of Ta, 3.1 wt% of Mo, 5.8 wt% of W, 4.9 wt% of Re, 0.10 wt% of Hf, 2.9 wt% of Cr, 5.8 wt% of Co and 5.0 wt% of Ru in terms of weight ratio, with the remainder consisting of Ni and unavoidable impurities.

6. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.8 wt% of Al, 5.8 wt% of Ta, 3.9 wt% of Mo, 5.8 wt% of W, 4.9 wt% of Re, 0.10 wt% of Hf, 2.9 wt% of Cr, 5.8 wt% of Co and 6.0 wt% of Ru in terms of weight ratio, with the remainder consisting of Ni and unavoidable impurities.

7. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 further comprising 0-2.0 wt% of Ti in terms of weight ratio.

8. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 further comprising 0-4.0 wt% of Nb in terms of weight ratio.

9. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 further comprising at least one of elements selected from B, C, Si, Y, La, Ce, V and Zr.

10. (Original) An Ni-based single crystal super alloy according to claim 9 having a composition comprising 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr in terms of weight ratio.

11. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 1.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 10.0-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

12. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.8-7.0 wt% of Al, 4.0-5.6 wt% of Ta, 3.3-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.9-4.3 wt% of Cr, 0-9.9 wt% of Co, 4.1-

14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

13. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 1.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.9-5.0 wt% of Cr, 0-9.9 wt% of Co, 6.5-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

14. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-6.0 wt% of Ta, 3.3-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

15. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-5.6 wt% of Ta, 3.3-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

16. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 3.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15

wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

17. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.8-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 3.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

18. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta, 3.1-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.9-4.3 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 4.0 wt% or less of Nb, 2.0 wt% or less of Ti, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

19. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 having a composition comprising 5.0-7.0 wt% of Al, 4.0-10.0 wt% of Ta+Nb+Ti, 3.3-4.5 wt% of Mo, 4.0-10.0 wt% of W, 3.1-8.0 wt% of Re, 0-0.50 wt% of Hf, 2.0-5.0 wt% of Cr, 0-9.9 wt% of Co, 4.1-14.0 wt% of Ru, 0.05 wt% or less of B, 0.15 wt% or less of C, 0.1 wt% or less of Si, 0.1 wt% or less of Y, 0.1 wt% or less of La, 0.1 wt% or less of Ce, 1 wt% or less of V and 0.1 wt% or less of Zr.

20. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 wherein, when lattice constant of matrix is taken to be a1 and lattice constant of precipitation phase is taken to be a2, $a2 \leq 0.999a1$.

21. (Original) An Ni-based single crystal super alloy according to claim 20 wherein the lattice constant of the precipitation phase a2 is 0.9965 or less of the lattice constant of the matrix a1.

22. (Original) An Ni-based single crystal super alloy, wherein lattice constant of its precipitation phase a2 is 0.9965 or less of lattice constant of its matrix a1, and having a composition including Re and Ru, and 2.9-4.5 wt% of Mo.

23. (Original) An Ni-based single crystal super alloy, wherein lattice constant of its precipitation phase a2 is 0.9965 or less of lattice constant of its matrix a1, and having a composition including 2.9-4.5 wt% of Mo, 3.1-8.0 wt% of Re and 4.1-14.0 wt% of Ru.

24. (Previously Presented) An Ni-based single crystal super alloy according to claim 1 wherein a dislocation space of the alloy is 40 nm or less.